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QUERY CONTROL FORM				RTIS USE ONLY	
Application No.	09206132	Prepared by	ewc	Tracking Number	05874634
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JACKET			
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION

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g. Brief Description
h. Sequence Listing
i. Appendix
j. Amendments
k. Other

CLAIMS

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MESSAGE

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Is there date missing
after word "grant"?

Please advise
Thank you

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RESPONSE No, changed wording slightly. (copy attached)

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E-5 (Rev. 10/01/02)

RPI-008CP

TUMOR CELLS MODIFIED TO EXPRESS B7-2 ~~AND B7-3~~ WITH INCREASED IMMUNOGENICITY AND USES THEREFOR

Government Funding

Work described herein was supported under grant awarded by the National Institutes of Health. The U.S. government therefore may have certain rights to this invention.

Related Applications

~~This application~~ is a Continuation-in-part of U.S. Serial No. 08/147,773 filed November 3, 1993 entitled "~~Tumor Cells Modified to~~ Express B7-2 and B7-3 with Increased Immunogenicity and Uses Therefor". The contents of ~~this application~~ is incorporated herein by reference.

Background of the Invention

Induction of a T lymphocyte response is a critical initial step in a host's immune response. Activation of T cells results in T cell proliferation, cytokine production by T cells and generation of T cell-mediated effector functions. T cell activation requires an antigen-specific signal, often called a primary activation signal, which results from stimulation of a clonally-distributed T cell receptor (hereafter TcR) present on the surface of the T cell. This antigen-specific signal is usually in the form of an antigenic peptide bound either to a major histocompatibility complex (hereafter MHC) class I protein or an MHC class II protein present on the surface of an antigen presenting cell (hereafter APC). CD4+ T cells recognize peptides associated with class II molecules. Class II molecules are found on a limited number of cell types, primarily B cells, monocytes/macrophages and dendritic cells, and, in most cases, present peptides derived from proteins taken up from the extracellular environment. In contrast, CD8+ T cells recognize peptides associated with class I molecules. Class I molecules are found on almost all cell types and, in most cases, present peptides derived from endogenously synthesized proteins. For a review see Germain, R., *Nature* 322, 687-691 (1986).

It has now been established that, in addition to an antigen-specific primary activation signal, T cells also require a second, non-antigen specific, signal to induce full T cell proliferation and/or cytokine production. This phenomenon has been termed costimulation. Mueller, D.L., et al., *Annu. Rev. Immunol.* 7, 445-480 (1989). Like the antigen-specific signal, the costimulatory signal is triggered by a molecule on the surface of the antigen presenting cell. A costimulatory molecule, the B lymphocyte antigen B7, has been identified on activated B cells and other APCs. Freeman, G.J., et al., *J. Immunol.* 139, 3260-3267 (1987); Freeman, G.J., et al., *J. Immunol.* 143, 2714-2722 (1989). Binding of B7 to a ligand